

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty's Docket No: 101141-12

Applicant(s) : German A. Valcarce

Filed : Concurrently herewith

For : Cholesterol Desaturases from Ciliates, Methods and Uses

INFORMATION DISCLOSURE STATEMENT

Hon. Assistant Commissioner of Patents Washington, D.C. 20231

Dear Sir:

The following sections are being submitted for this Information Disclosure Statement:

- Sec. 1 Preliminary Statements
- Sec. 2 Identification of Time of Filing
- Sec. 4 Statements with Respect to Listing of Information
- Sec. 5 Statements with Respect to Translations of Non-
 - English Information
- Sec. 6 Statements with Respect to Copies of Listed Information Items Accompanying This Statement
- Sec. 7 Statement of Non-Possession of Documents
- Sec. 8 Concise Explanation of Listed Information Items

Section 1 Preliminary Statements

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56.

While this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56 it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(b) the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists.

Section 2 Identification of Time of Filing

This Information Disclosure Statement accompanies the new patent application submitted herewith.

The art was cited in USSN 09/835,804 of which this is a continuation-in-part application.

Section 4 Statements with Respect to Listing of Information

A list of the patent and publications is set forth on the attached 3 pages of Form PTO-1449 (modified).

Section 5 Statements with Respect to Translations of Non-English Information

 $\,$ No English language translation of the foreign language patent is readily available.

Section 6
Statements with Respect to Copies of Listed Information
Items Accompanying This Statement

A copy of all the references are enclosed with exception to the publication entitled "Salts of Milk" by P.F. Fox (page 3, AU). This publication is no longer available. A copy of this publication, however, was filed with the IDS filed in USSN 09/641,609 of which USSN 09/835,804 was a continuation-in-part application of which this application is a continuation-in-part application.

Section 7 Statement of Non-Possession of Documents

With respect to the herein listed foreign patent document(s), non-patent publication(s) or other non-patent item(s) of information in written form which do not accompany this Information Disclosure Statement, I hereby state in accordance with 37 CFR 1.56(b) that the documents are not in my possession and I have been informed by the inventor(s) that the document(s) are not in his/her possession.

Section 8 Concise Explanation of Listed Information Items

A concise explanation of the items listed on PTO-1449 (modified) is given for each non-English listed item.

German 42 38 842

Process for high cell density fermentation of ciliates (species: Tetrahymena, Colpidium) in axenic medium, especially for recovery of secreted natural substances, whereby the Ciliates are supplied with a cheap nutrient medium that contains the nutrient substances in predominantly particulate form, while the spent nutrient medium, enriched with useful natural substances, is recovered via a polypropylene membrane system with simultaneous retention of the cells in the fermentation vessel.

Respectfully Submitted,

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Attorney for Applicant

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LIST OF PATENTS AND PUBLICATIONS APPLICANT'S INFORMATION

DISCLOSURE STATEMENT (Form PTO-1449 Modified)

		Page 1
Attorney Docket:	Serial No.	
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U.S. PATENT DOCUMENTS

Examiner's Initial			Doc	um	ent	Nui	mbe	er	Date	Name	Class	Sub Class	Filing Dat
	AA	4	1	0	4	2	8	6	8/1978	Fallis et al.	1 3 3 3 3	CIAGO	
	AB	4	2	3	4	6	1	9	11/1980	Yano et al.	 		
	AC	4	3	3	3	9	5	9	6/1982	Bracco et al.			
	AD	4	8	8	0	5	7	3	11/1989	Courregelongue et al	 		
	AE	4	9	2	1	7	1	0	5/1990	Beitz et al.	 		
	AF	4	9	9	7	6	6	8	3/1991	Johnson et al.			
	AG	5	0	3	9	5	4	1	8/1991	Keen			
	AH	_5	0	9	1	2	0	3	2/1992	Conte, Jr., et al.			
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FOREIGN PATENT DOCUMENTS

AT	Document Number	Date	Country	Class	Sub Class	Tran Yes	slation No
AL	42 38 842	5/1994	Germany				
AM	WO99/17620	4/1999	PCT			-	
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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	AR	Mallory et al., "Dehydrogenation and Dealkylation of Various Sterols by Tetrahymena pyriformis:,
		Lipids, vol. 6, No. 3, pgs. 149-153 (1970)
	AS	Conner et al.,"The Steric Requirements for Sterol Inhibition of Tetrahymanol Biosynthesis", Lipids,
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ı	AI	rerguson et al., "Effect of Sterol Replacement in Vivo on the Fatty Acid Commonition of T. I.
- 1		Ferguson et al., "Effect of Sterol Replacement in Vivo on the Fatty Acid Composition of Tetrahymena", Journal of Biological Chemistry, Vol. 250, No. 17, pgs. 6998-7005 (1975)
		30d Har of Biological Chemistry, Vol. 250, No. 17, pgs. 6998-7005 (1975)
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DATE CONSIDERED:

EXAMINER: Initial if Reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformation and not considered, include copy of this form with next communication to applicant.

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	AA	5	0	9	2	9	6	4	3/1992	Conte, Jr. et al.				
	AB	5	1	1	6	6	2	8	5/1992	Ogasahara et al.				
	AC	5	3	2	6	5	7	9	7/1994	Richardson et al.				
	AD	5	3	7	8	4	8	7	1/1995	Merchant et al.				
	AE	5	7	8	0	0	9	5	7/1998	Jackeschky				
	AF	5	8	5	6	1	5	6	1/1999	Ambrosius et al.				
	AG	5	8	7	6	9	9	3	3/1999	Saito et al.			 	
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AL							
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 AR Hellenbroich et al., "Cultivation of Tetrahymena thermophila in a 1.5-m³ airlift bioreactor", Appl. Microbiol.Biotechnol, Vol. 51, pgs. 447-455 (1999)
 AS Conner et al., "The Conversion of Cholesterol to Δ^{5,7,22} -Cholestatrien-3β-ol by Tetrahymena pyriformis", Journal of Biological Chemistry, Vol. 244, No. 9, pgs. 2325-2333 (1969)
 AT Bertram et al., "Isolation of a Stearoyl CoA Desaturase from Tetrahymena thermophila", J. Brotozool, Vol. 28, No. 1, pgs. 127-131 (1981)

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FOREIGN PATENT DOCUMENTS

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AM AN							
AO AP							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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] ^	Valcarce et al., "Isolation of a Δ^7 -cholesterol desaturase from <i>Tetrahymena thermophila</i> ", Appl.
	Wicholdi. Biolectiol., Vol. 53, pgs. 591-595 (2000)
A	L. Rusoff; "Milk: Its Nutritional Value at a Low Cost for People of All Ages" Dopt of Dairy Science
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	Cholesterol and Softward Fee Intelligent Mortality can be explained by Differences in
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A	U P.F. Fox et al. 1998: Salts of Mills Dions Chamistre, 1 Division
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